

MLPA Initiative

Presentation by Laura Rogers-Bennett
to the Blue Ribbon Task Force
February 22, 2005



CALIFORNIA

Hathaway

Pierce Bros. Processing Monterey 1933

1. Marine Communities: Is the whole > sum of the parts?



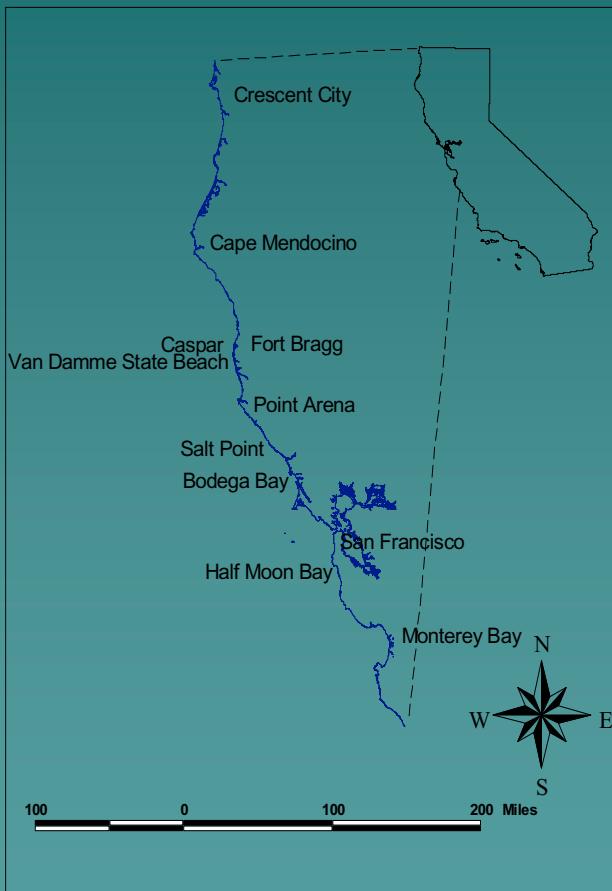
- ¥ Positive interspecific interactions (Bertness and Leonard 1997)

Biogenic Structure Inside MPAs



- ¥ Coral Reefs (Reaka-Kudla 1997)
- ¥ Kelp Beds (Estes & Duggins 1995)
- ¥ Mussel Beds (Suchanek 1998)
- ¥ Sea Urchins (Rogers-Bennett & Pearse 2001)

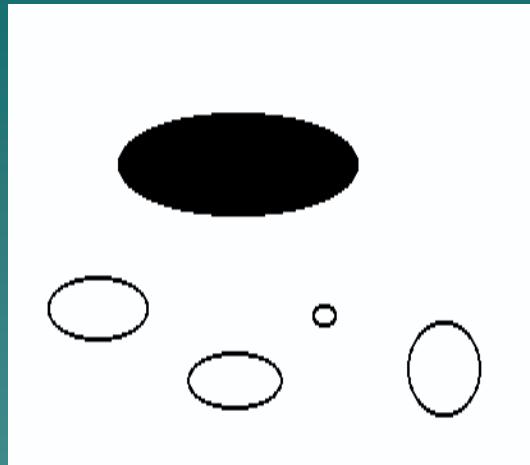
MPA Study Sites



Urchin Spine Canopy



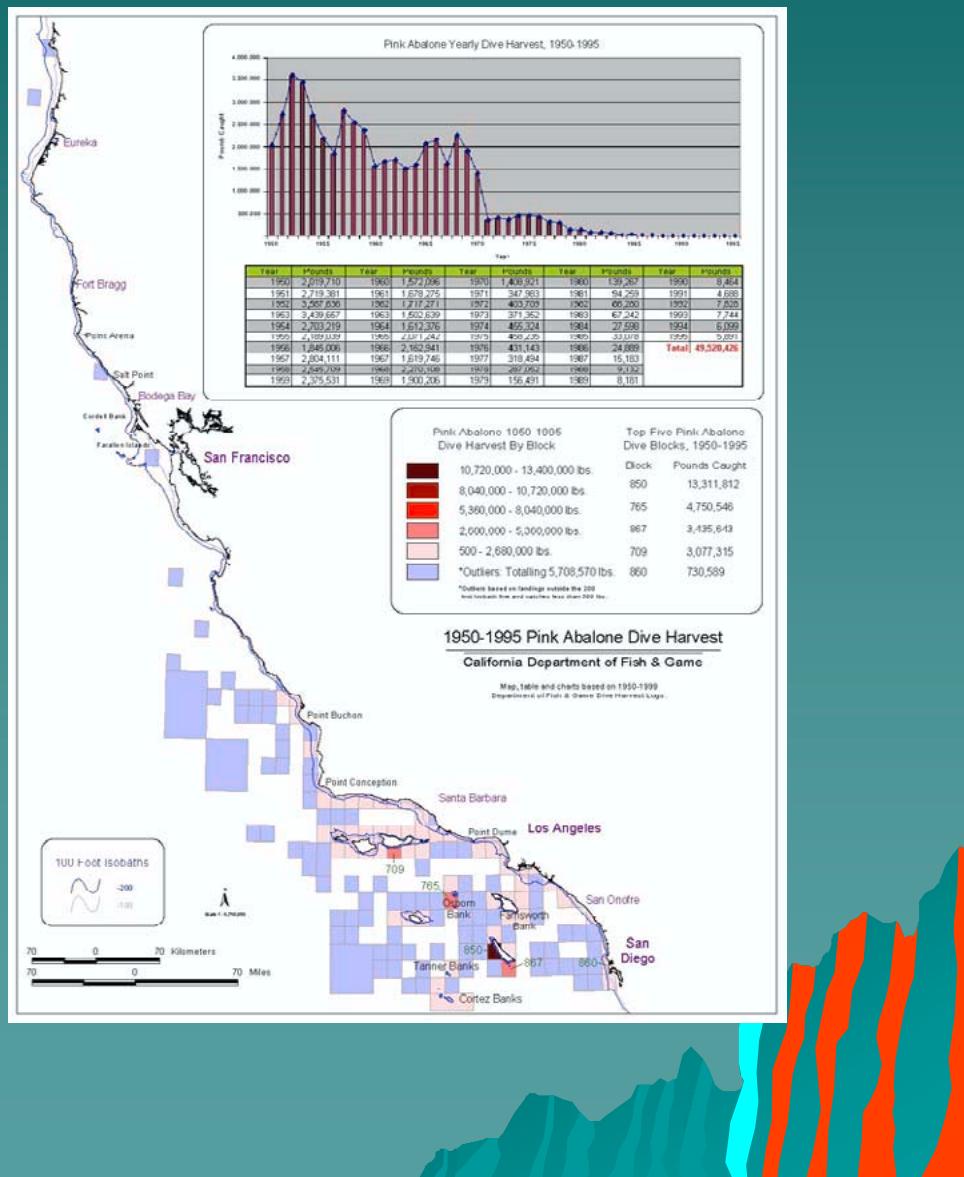
2. Spatial patterns in populations and productivity



- ¥ In “Source” patches local reproduction exceeds local extinction.
- ¥ In ‘Sink’ patches local extinction exceeds local reproduction.
- ¥ Levins described Metapopulations



Pink Abalone Catch Data 1950-1995



Future Challenges: Tidepools Qingdao, China

